



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,266	04/19/2004	Ren-Hao Liu	3313-1162PUSI	9404

2292 7590 09/19/2007  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

MAHMOUDZADEH, NIMA

ART UNIT	PAPER NUMBER
----------	--------------

2609

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/19/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

**Application No.**

10/826,266

**Applicant(s)**

LIU, REN-HAO

**Examiner**

Nima Mahmoudzadeh

**Art Unit**

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/19/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/19/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Shabtay et al. (US Patent No. 6,895,441)

**Regarding claim 1**, Shabtay et al. teach a method for multi-protocol label switching (MPLS) link protection comprising the steps of:

checking that a label switching path (LSP) breaks down (Column 8, lines 15-19);

redirecting the LSP to a backup LSP with no bandwidth reservation (Column 11, lines 56- 59) ;

rearranging to obtain an auxiliary backup LSP (Column 4, lines 9-13) according to the current resource distribution in the MPLS network (Column 4, lines 4-13);

checking if the broken LSP is recovered (Column 8, lines 14-21); and

restoring the LSP (column 9, lines 4-11).

**Regarding claim 2,** Shabtay et al. teach the method of claim 1, wherein in the step of checking that a label switching path (LSP) breaks down a router before the breaking point sends out a fault information signal to an ingress router of the LSP (Column 8, lines 25-29).

**Regarding claim 3,** Shabtay et al. teach the method of claim 2, wherein the router before the breaking point simultaneously sends at least two (Column 9, lines 31-48 and lines 55-57) of the fault information signals (Column 9, lines 39-49).

**Regarding claim 4,** Shabtay et al. teach the method of claim 1, wherein each of the default backup LSP's is defined according to the transmission capacities (Column 11, lines 4-6) of the LSP and of the backup LSP (Column 11, lines 2-19).

**Regarding claim 5,** Shabtay et al. teach the method of claim 1 further comprising the step of waiting a default failure time (Column 9, line 29) before the step of rearranging to obtain an auxiliary backup LSP according to the current resource distribution in the MPLS network (column 9, lines 26-29).

**Regarding claim 6,** Shabtay et al. teach the method of claim 1, wherein in the step of checking if the broken LSP (Column 9, line 51) is recovered a router before the breaking point (Column 9, line 53) sends a recovery signal to an ingress router of the LSP (Column 9, lines 51-57).

**Regarding claim 7,** Shabtay et al. teach the method of claim 6, wherein the router before the breaking point simultaneously sends two of the signals (Column 9, lines 31-48 and lines 55-57).

Art Unit: 2609

**Regarding claim 8**, Shabtay et al. teach the method of claim 1 further comprising the step of waiting a default available time before the step of restoring the LSP (Column 10, lines 1-4).

**Regarding claim 9**, Shabtay et al. teach the method of claim 1, wherein the step of restoring the LSP rearranges to obtain a restored LSP according to the current resource distribution of the MPLS network and redirects the LSP to the restored LSP (Column 9, lines 4-24).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. (US Patent Publication No. 2002/0060985) teach method for high speed rerouting in multi protocol label switching network

Charny et al. (US Patent Publication No. 2004/0052207) teach load balancing for fast reroute backup tunnels

4. Any responses to this Office Action should be **faxed** to (571) 273-8300 or **mailed** to:

Commissioner for Patent  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses should be brought to**  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Art Unit: 2609


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nima Mahmoudzadeh whose telephone number is (571) 270-3527. The examiner can normally be reached on Monday - Friday 7:30am - 5:00 pm EST:

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nima Mahmoudzadeh

AU 2609

  
BENNY Q. TIEU  
SPE/TRAINER